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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/988,404 | 11/19/2001 | Hiroko Suzuki | DAIN: 657 | 8579 |

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Parkhurst, Wendel, L.L.P.
Suite 210
1421 Prince Street
Alexandria, VA 22314-2805

| EXAMINER | |
|---|---|
| MCCLENDON, SANZA L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1711 | 4 |

DATE MAILED: 06/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-4

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/988,404 | SUZUKI ET AL. | |
| | Examiner | Art Unit | |
| | Sanza L McClendon | 1711 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 November 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Noritake et al (5,773,126).

Noritake et al discloses composite films having slip surface properties. Said composite film comprises a substrate film (1) and a radiation curable hard coat layer that comprises inorganic/organic particles and an organic silicone (4) having formed on it a slip portion (31) comprised of irregularities serving to create a surface having a slip property—see figure 1B. This anticipates claim 1. Said slip portion has an irregularity pattern (concave and convex pattern) produces by the use of an embossing film (2). This anticipates claim 5. Said embossing film is can be selected from those listed in column 3, lines 60-62. The embossing film is removes after the curing of the hard coat layer to provide a slip film having a hard coat layer with a slip portion formed therein. Said slip film/portion is formed because of the inorganic/organic particulate materials and the organic silicone act together in a synergistic fashion to improve the slip properties of the slip film/portion—see column 6, lines 15-20. Said substrate film has excellent total light transmittance and low haze, wherein said films can be found in column 3, lines 5-7. Said hard coat layer is curable by ultraviolet radiation or electron beam irradiation and comprises a radiation curable pre-polymer, an oligomer, and/or monomer having a polymerizable unsaturated bond or an epoxy group, a photopolymerization initiator, fine particles of inorganic and/or organic materials, and an organic silicone. Per example B, Noritake et al teaches a clear hard coat film comprising a TAC film as the substrate layer and a hard coat layer formed from a radiation curable composition as described above, wherein the hard coat layer is formed so that the inorganic/organic particles and organic silicone incorporated in the hard coat resin composition is floated on the surface thereof, which results in the slip film/portion of the composite. This anticipates claims 2-3

Noritake et al does not expressly teach the ultraviolet region that is absorbed by the transparent substrate is less than 350 nm and the wavelength region absorbed by the photoinitiator is 350 to 450 nm. However, Noritake et al teaches transparent substrates, such as TAC, which are well known in the art to absorb UV wavelengths less than 350. Noritake, additionally, teaches photoinitiators, such as those listed in column 5, lines 3-14, that are well-known

in the art to absorb ultraviolet radiation within the region of 350 to 450. Therefore claim 4 is found to be inherent to the composite as taught.

The claims 1-5 are anticipated by the reference.

3. Claims 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Noritake et al (5,773,126).

Noritake et al is described in the above rejection. Noritake et al teaches a method of forming a composite film by coating on a transmissive film, such as TAC, an ultraviolet curable resin composition comprising an radiation curable resin, inorganic/organic particles, an organic silicone, and an photopolymerization initiator, covering the top of said radiation resin composition an embossing film comprising an irregularity pattern, such as a pyramids deformations, which may lack transparency (see column 4, line 2) but can eliminates inhibition of curing by oxygen (see column 4, lines 29-30), and then curing said laminate with ultraviolet radiation. This anticipates claim 7 and 11, wherein the film produced by this method anticipates claim 12. Once the composite laminate is cured the embossing film is removed from the laminate to provide a slip film having a hard coat layer with a slip portion formed thereon. This anticipates claim 9. Per example B, Noritake et al teaches a clear hard coat film comprising a TAC film as the substrate layer and a hard coat layer formed from a radiation curable composition as described above, wherein the hard coat layer is formed so that the inorganic/organic particles and organic silicone incorporated in the hard coat resin composition is floated on the surface thereof, which results in the slip film/portion of the composite. This anticipates claim 10.

Noritake et al does not expressly teach the ultraviolet region that is absorbed by the transparent substrate is less than 350 nm and the wavelength region absorbed by the photoinitiator is 350 to 450 nm. However, Noritake et al teaches transparent substrates, such as TAC, which are well known in the art to absorb UV wavelengths less than 350. Noritake, additionally, teaches photoinitiators, such as those listed in column 5, lines 3-14, that are well-known in the art to absorb ultraviolet radiation within the region of 350 to 450. Therefore claim 4 is found to be inherent to the composite as taught.

Claims 7-12 are anticipated by the reference.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al (5,773,126).

Noritake et al is described in the above two rejections. Noritake et al teaches a method of forming a composite film by coating on a transmissive film, such as TAC, an ultraviolet curable resin composition comprising an radiation curable resin, inorganic/organic particles, an organic silicone, and an photopolymerization initiator, covering the top of said radiation resin composition an embossing film comprising an irregularity pattern, which may lack transparency (see column 4, line 2) but can eliminates inhibition of curing by oxygen (see column 4, lines 29-30). Noritake et al does not expressly teach curing said cast composite film with ultraviolet radiation through the layer of transparent film to cure the radiation curable layer. However because Noritake et al teaches the top embossing film can lack some transparency, it would have been obvious for a skilled artisan, with an expectation of a constant and substantial cure of said composite, to cure said composite by irradiating through a transparent layer, such as the substrate layer in the absence of unexpected results and/or evidence to the contrary.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

Sanza L McClendon
Examiner
Art Unit 1711

James J. Seidleck
**Supervisory Patent Examiner**
**Technology Center 1700**